

guished French author is concerned, that he gives them different names and separate notices in his valuable work.

EXPLANATION OF THE PLATES.

PLATE VI.

- Fig. 1. *Cyclura venosa*, seen from above, natural size.
 2. The same, enlarged.
 3. The same, side view, natural size.
 4. The same, enlarged.
 5. Antennæ and mouth.
 6. Hind leg.
 7. Front leg.

PLATE VII.

8. *Dynamene Montaguï*, normal form, enlarged.
 9. *Dynamene Montaguï*, showing constriction of front segments.
 10. *Dynamene varians*, normal form, enlarged.
 11. *Dynamene varians*, constricted form.
 12. *Idotea pelagica*.

 Descriptions of five new Species of *Gonyleptes*.

By ARTHUR G. BUTLER, F.L.S., F.Z.S., &c.

[Read May 7, 1874.]

(PLATE VIII.)

SINCE the publication of my Monograph of the species of this interesting genus of Harvest-Spiders, the collection of the British Museum has been enriched by the presentation and purchase of several additional new species, which I now propose to describe.

1. GONYLEPTES TERRIBILIS, n. sp. (fig. 1).

In some respects similar to *G. armillatus*.

Colours: piceous; the sutures, prothoracic region, and sternal surface of cephalothorax dull testaceous; palpi and chelæ testaceous; three front pairs of legs luteous; coxæ and femora of hind legs black; tibiæ and tarsi piceous.

Male. Above, oculiferous tubercle slightly prominent, obtusely bispinose, with a minute granule in front of each little spine; behind the oculiferous tubercle and in front of the transverse suture are two series of minute granules, the anterior row composed of four, the posterior of two; central area of cephalothorax separated into four divisions by the sutures, and covered with minute granules; margined by a series of small irregular tubercles, gradually increasing in size to-

wards hind margin, also an inner lateral series of minute irregular granules; hind margin bearing in the centre two slightly divergent, short, acute spines, and on either side a long, robust, slightly depressed, curved spine directed backwards over the coxæ of hind legs, and having a minute tubercle on its inferior surface near the base; a second, robust, short, incurved spine on the postero-inferior edge of the coxal sheath; abdominal segments margined with tubercles; legs rather long, femora of first three pairs minutely denticulate along their antero-inferior margin; third pair with three prominent denticles, tibial second joint also denticulate on its postero-inferior margin; hind legs with coxæ obtusely trispinose and denticulate; femora densely spinose; three curved spines on the interior surface of its proximal end prominent; tibiæ densely spinose, the spines on inferior surface very prominent, increasing in length towards the proximal end, which terminates internally in four short radiating spines; tarsi densely denticulate; palpi subcylindrical, with short slender spines; cheliceres smooth, cylindrical; pincers serrated internally; ventral surface of legs and cephalothorax minutely granulose.

Length of cephalothorax $3\frac{1}{2}$ lines, of entire body (including closed cheliceres) 5 lines; relative length of legs 1, 3, 2, 4, the fourth pair being the longest.

Huasampilla, Peru (*Whitely*). One example. B.M.

This species may at once be distinguished from all its allies by the densely spinose character of the hind pair of legs.

2. GONYLEPTES DEFENSUS, n. sp. (fig. 4).

Colours: pitchy; the oculiferous tubercle, the coxæ of the first three pairs of legs, and the edges of abdominal segments yellow.

Male. Above, oculiferous tubercle scarcely prominent, with two central granules; prothoracic area transversely oblongo-ovate; central area subrotundate, smooth, separated into four divisions by the sutures; extreme edge of the margin minutely granulose; hind margin terminating on each side in a robust, oblique, slightly depressed spine; abdominal segments minutely granulose; three front pairs of legs nearly smooth, excepting the tibiæ of the third pair, which are strongly dentate externally; hind legs with coxæ coarsely trispinose on their external lateral margins; femora rugose, with four increasing denticles on their external inferior margin at the proximal end; tibiæ densely tuberculate and dentate-pectinate on both lateral margins; palpi subcylindrical, rather rugose, with short slender spines; cheliceres subcylindrical, pilose; ventral surface of cephalothorax coarsely rugose.

Length of cephalothorax $2\frac{1}{3}$ lines, of entire body 3 lines; relative length of legs 1, 3, 2, 4, the fourth pair being the longest.

Female differs from the male in the obsolete character of the posterior

lateral spines of the cephalothorax and the much less robust and scarcely dentated hind legs.

Falkland islands (*T. Havers*). Four specimens. B.M.

This interesting little novelty is intermediate between the preceding species and *G. muticus* of Koch.

We have a second new species from the same locality, but, unfortunately, only of the female sex, so that it is hardly satisfactory to describe it.

3. *GONYLEPTES FUNESTIS*, n. sp. (figs. 5, 5 a, profile).

Colours: piceous; streaked below with reddish testaceous; the tips of the tubercles and spines of cephalothorax orange; the legs at the terminations of the joints, the basal joints of palpi, a longitudinal streak on the femoral joint, the tips of the spines and the greater part of the chelæ of cheliceres testaceous; the spines and tubercles on the hind legs entirely orange; the tarsi clothed with silky pale testaceous pilosity; cheliceres and palpi olivaceous (excepting the basal joints).

Male. Above, oculiferous tubercle moderately prominent, with two slightly divergent short central spines; two series of minute granules in front of transverse suture, the anterior series composed of four, the posterior of three: central area of cephalothorax separated into five divisions by the sutures, and trisegmentate behind; the two front divisions bear an orange tubercle and three minute blackish granules, the third a series of four minute granules, the fourth two central orange tubercles and two minute granules, the fifth four minute granules; the margin is rugose, and its outer edge granulose; the three segmentations are granulose, the two central granulations on the second and third segmentations being lengthened into acute spines; hind margin bearing on each side a long, robust, curved, depressed spine directed backwards; legs granulose and denticulated, the denticles very minute in the first two pairs and confined to the antero-inferior margin of the femora, longer in the third pair, and extending along the tibiæ; coxæ of hind legs obtusely trispinose externally, the two lateral spinous processes projecting outwardly, the supero-terminal one almost perpendicularly, also a minute acute terminal spine on the infero-internal margin; femora and tibiæ prominently tuberculate, the lateral tubercles on both sides elongated into obtuse spinous processes, most developed at the proximal extremity of the femora; palpi subcylindrical, with long slender spines; cheliceres cylindrical, pilose, pincers serrated internally; ventral surface of cephalothorax smooth.

Length of cephalothorax $4\frac{1}{2}$ lines, of entire body (including closed cheliceres) 6 lines; relative length of legs 1, 3, 2, 4.

Chili (*Reed*). One specimen. B.M.

4. *GONYLEPTES REEDII*, n. sp. (figs. 3, 3a, hind leg).

Colours: cephalothorax dull reddish clay-coloured, spotted irregularly with black, its marginal ridge bright castaneous; the projecting border piceous, including the lateral spines and posterior segmentation; cheliceres pitchy; palpi dirty testaceous; three front pairs of legs testaceous, third pair varied with piceous; coxæ of fourth pair castaneous; femora piceous; tibiæ piceous, clouded with castaneous; tarsi bright ochraceous.

Male. Above, oculiferous tubercle tolerably prominent, with two short, acute, divergent, central spines; posterior area of cephalothorax trisegmentate, minutely and indistinctly granulated; ventral surface projecting laterally beyond margin, terminating in a long, robust, depressed spine; three front pairs of legs smooth; coxæ of hind legs externally obtusely bispinose; femora rugose, trispinose, the first at distal extremity projecting obliquely inwards from inferior surface, the second projecting laterally from first third of supero-internal margin, the third projecting obliquely downwards from supero-external margin close to proximal extremity; at the proximal extremity is also a short, obtuse, incurved denticle; tibiæ slightly curved, bearing seven to eight acute curved spines on the internal surface; palpi subcylindrical, nearly smooth, with short slender spines; cheliceres cylindrical, slightly rugose, the pincers minutely serrated internally; ventral surface of cephalothorax smooth, of last two or three segments of abdomen minutely granulated.

Length of cephalothorax 4 lines, of entire body (including closed cheliceres) 5 lines; relative length of legs 1, 3, 2, 4.

Chili (*Reed*). Two specimens. B.M.

Belongs to the *G. curvipes* group, and allied to *G. bicornis* of Nicolet.

5. *GONYLEPTES DOCILIS*, n. sp. (figs. 2, 2a, hind leg).

Same general form as preceding species.

Colours: cephalothorax greenish testaceous, spotted at the sides and behind with black; lateral spines and surrounding area black; posterior third of ventral surface dull castaneous; a central longitudinal orange band; three front pairs of legs and palpi bright ochreous; hind legs piceous at base above, dull castaneous below and at proximal extremity; tibiæ and tarsi dull castaneous; terminal joints of tarsi of third pair of legs green.

Male. Above, oculiferous tubercle slightly prominent and bifurcate above but not spined; central area of cephalothorax separated into four divisions by the sutures and trisegmentate behind, the segmentations indistinctly granulated; lateral ridge slightly rugose; projecting ventral area terminating on each side of the hind coxæ in a long,

robust, depressed, bifid spine; three front pairs of legs smooth; coxæ of hind legs terminating externally above in an obtuse, nearly perpendicular spinose projection; femora rugose, much curved, with a strong irregular spine projecting obliquely upwards from the upper surface of the distal extremity, a second shorter spine projecting laterally from the internal surface at end of first third; also a number of obtuse pectinate denticles projecting from each side, but radiating at the proximal extremity; tibiæ rugose, with three long curved spines and several minute denticles projecting downwards and inwards from inferior surface, a space being left between the first two spines and the third; tarsi simple; palpi subcylindrical, nearly smooth, with short slender spines; cheliceres cylindrical, pilose, the pincers serrated internally; ventral surface of cephalothorax dull, but smooth; last two segments of abdomen minutely granulated.

Length of cephalothorax $3\frac{1}{2}$ lines, of entire body, including closed cheliceres, 4 lines; relative length of legs 1, 3, 2, 4.

Chili (*Reed*). One specimen. B.M.

Possibly the *G. bicornis* of Nicolet, but without the double spine on the oculiferous tubercles, and with a different distribution of spines on the hind legs, so that I suspect it to be distinct; it is evidently allied to *G. modestus* of Nicolet.

Resemblances between the Bones of Typical living Reptiles and the Bones of other animals. By HARRY GOVIER SEELEY, F.L.S., F.G.S., Professor of Physical Geography in Bedford College, London.

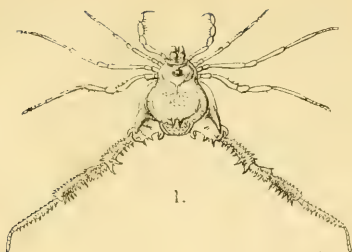
[Read June 18, 1874.]

PART I.

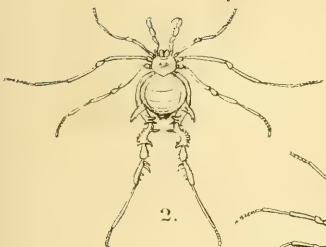
THE SIMILITUDES OF CROCODILE BONES.

§ 1. *The Mammalian Characters of the Crocodile.*

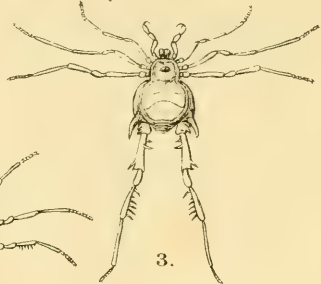
IN the palate, Crocodiles are remarkable for the extent to which the posterior nares are carried backward by the closing over them of the palatine and pterygoid bones. This condition is paralleled in the great toothless ant-eater, *Myrmecophaga*, where the nares are carried back behind the pterygoid bones so as to make a flat uncleft palate. Nor is the resemblance less close in the fore part of the skull; for the immense toothless maxillary



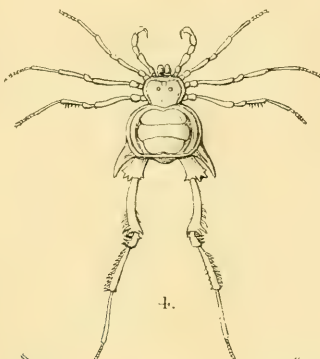
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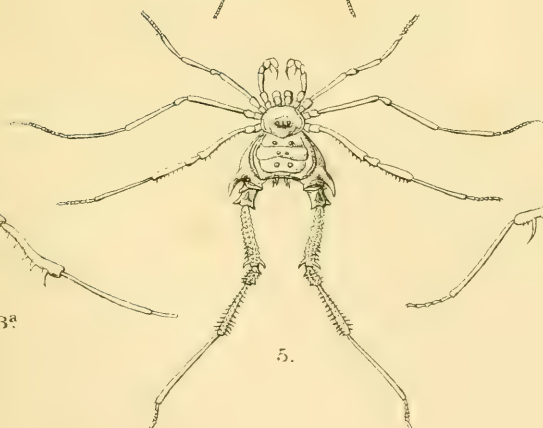
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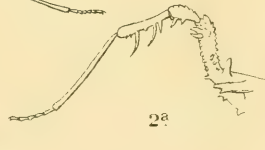
4.



5.



3^a



2^a



5^a